3.9 VISUAL RESOURCES

Visual resources are composed of natural and built features that give a particular area its aesthetic qualities. These features form landscape character, or the overall impression an observer perceives of an area. Landforms, water surfaces, vegetation, and built features are part of the landscape character. This section first describes the visual character of the study area (lagoon and materials disposal/reuse locations), documents state and locally designated scenic resources, and then evaluates the proposed project and alternatives in terms of contrast.

3.9.1 AFFECTED ENVIRONMENT

San Elijo Lagoon Study Area

The study area for visual impacts includes San Elijo Lagoon and adjacent hillsides (about 1 to 2 miles distant) where there are public and private views of this feature. San Elijo Lagoon itself is located in northern coastal San Diego County and appears as a large natural feature at a low point, generally bounded to the north and south by the developed suburban hillsides of Solana Beach and Encinitas. The lagoon is a typical coastal wetland of San Diego, with a western connection to the Pacific Ocean and an eastern freshwater source (Escondido Creek). It is traversed by north-south infrastructure improvements, which include Coast Highway 101, NCTD railroad, I-5, and the CDFW dike, that constrain water flow and affect vegetation type. In addition, these infrastructure improvements present strong linear elements to viewers such as drivers on roads, hikers on lagoon trails, visitors at the Nature Center, and residences on the hillsides to the north and south. Generally west of I-5, the appearance is a mosaic of open water, unvegetated mudflats in earth tones, and low-growing vegetation in various hues of green with seasonal yellow and reddish cast (in the autumn and winter). These present muted colors and rounded elements with low to moderate contrasts between elements. Behind the dike and east of I-5, impounded freshwater has generated a vegetation system dominated by taller cattails and bulrushes, which make the vegetation system appear very thick and dense. There are pockets of open water as well. Moving upstream into Escondido Creek, the vegetation is characterized by taller trees, some that are deciduous so they are bare in winter and lush during the summer.

There are isolated areas of altered or developed lands within the lagoon, including the Nature Center at the very northern edge of the lagoon and accessed by Manchester Avenue, and abandoned sewage settling ponds just east of the railroad. Numerous dirt trails traverse the lagoon site, mostly on the upland edges of the Reserve. These trails appear as brown linear features crisscrossing the greens of the vegetation, but they are relatively narrow and modest in size. Because the SELC has an extensive education and community outreach focus, plus the lagoon is an attractive feature for birders and naturalists, a large number of visitors of all ages

come to the lagoon. Some electrical utilities also cross the site north to south and present signs of human intrusion (see Section 3.14 [Public Services and Utilities]). These features have not substantially diminished the overall character of the large, open, natural system.

Surrounding land uses to the north, generally north of Manchester Avenue, include residential, suburban development west of I-5, commercial uses at the interchange, agricultural uses just east of the interchange (with suburban homes on the hilltops above) and then a community college as Manchester Avenue eventually turns into a north-south roadway. Viewers in these northern locations generally include residents looking down from the hilltops that see the lagoon and, depending on their orientation, the Pacific Ocean to the west or developed hillsides in Solana Beach to the south. These viewers are in the near to middle distance (less than 0.25 mile to 1.5 miles). Viewers to the east of I-5 see the agricultural fields in the foreground, then the lagoon. Drivers and bicyclists along Manchester Avenue are elevated only modestly higher than the lagoon so they have reduced views, but the viewing distance depends on the viewers' elevation and their speed.

To the east, the development pattern is more rural-residential and the terrain more varied. The lagoon may be visible; particularly, the more dense vegetation at the creek and east basin, but there is not the same concentration of viewers oriented the same way. The nearest roadway, El Camino Real, is not adjacent to the lagoon so this feature is not highly visible.

The development pattern to the south is much like the north, particularly that area west of I-5. Homes are located on hilltops and those on the edges have views looking north at the natural-appearing lagoon, to the west at the open Pacific Ocean, and farther north at the developed hillsides of Encinitas. These views are also in the near to middle-ground distance (less than 0.25 mile to 2+ miles).

West of the lagoon is Cardiff Beach and the Pacific Ocean. This beach varies between cobble and sand depending on the season and other various beach nourishment activities. Viewers not focused on the ocean to the west can see large riprap along the edge of Coast Highway 101 and this is fairly consistent along the length of the study area. There is a small commercial area along Coast Highway 101 just south of the lagoon inlet so the viewer can see a multistory commercial building and a small cluster of restaurants with associated parking (known as Restaurant Row). The elevated structure of Coast Highway 101, and associated protective riprap, obscures views from the beach into the lagoon. Viewers on Coast Highway 101 have clear and close views of both the ocean and the lagoon for the nearly 0.75-mile-long stretch that parallels the lagoon. Because this is a four-lane road, with average daily traffic volumes over 20,000 trips, a large number of viewers are in this location. They are typically traveling at a rapid rate of speed (posted speed limit in the area ranges from 35–45 miles per hour [mph]) so their views would

last for minutes, at the most. There are bike lanes on Coast Highway 101 providing clear views of the lagoon and ocean at a slower pace.

Travelers on I-5 and the railroad would also have open views of the lagoon, looking both east and west for less than 0.75 mile. Like Coast Highway 101, these viewers would experience the ocean, hills in the distance, and the lagoon, but for a modest amount of time, generally 1 minute when traveling at the speed limit (freeway speed limit is 65 mph; train speed averages 50 mph). Heavy traffic would slow motorists down and prolong views of the area.

Materials Disposal Study Area

The various beach materials placement sites are characterized by cobbly or sandy beaches, typically backed by bluffs to the east with the ocean to the west. The bluffs are typically developed with residential uses. Some placement sites are adjacent to roads. Viewers of the sites are residents on the bluffs and visitors at the bluffs and down at the shore. The offshore and nearshore sites (LA-5, SO-5, SO-6, and offshore of Cardiff) are in the ocean and are not described further because they are located at distances not readily visible (LA-5 is approximately 28 miles southwest of San Elijo Lagoon, SO-5 and SO-6 are approximately 1 mile offshore) and activities to place materials at these sites include underwater pipelines that are not visible under the water surface and a transport barge that is a typical ocean vessel commonly used and seen along the coast. The specific characteristics and viewers of the onshore sites are discussed separately below.

Moonlight

The proposed Moonlight placement site is located at the foot of B and C streets at Moonlight Beach, north of the proposed project. The proposed site is approximately 770 feet long (0.1 mile). Residential uses occur adjacent to the site, to the north and south. The beach area is relatively flat but quickly slopes up to the east, north, and south. Public access is found at Moonlight Beach (B and C streets) and south at the D Street stairway. Popular surf breaks along this reach include D Street, Boneyards, and Swami's. The site viewscape contains a wider sand area and a park because in this location the bluffs trend easterly and open up to allow Cottonwood Creek to drain into the ocean. The City of Encinitas places approximately 1,000 cy of sand annually on Moonlight Beach to augment the naturally occurring sand that erodes into the ocean. North and south of the park, there is a narrow sand shelf from the cliffs to a cobble slope, then sand sloping to the water. Riprap has been placed at the base of the bluffs to protect residential structures and intermittent access stairs. Except when modified by projects such as the 2001 RBSP or 2012 RBSP, high tide comes to the base of the bluffs and the limited sandy beach

is not visible. The Moonlight site would have a combination of viewers from private residences, a popular public access, a park, and the beach.

Leucadia

Generally characterized with vegetated bluff tops, Leucadia is located approximately 4 miles north of the proposed project. The bluffs are vegetated near the top where the slopes are less steep, but at the base there are cobbles. The 2012 RBSP placed material at this site in fall 2012 so the cobbles are currently less exposed. Some sea caves in this area have been filled and the fill material is visible against the lighter, tan bluffs. At low tide, the sand and cobble beach is visible; however, at high tide, the waves typically crash against the cliffs. Development along this segment includes single-family residences, apartments, and condominiums, which are located approximately 80 to 100 feet above the beach on the bluff. The Leucadia site would have a combination of viewers from private residences and the beach.

Cardiff

The Cardiff site is typically characterized by cobble beaches and a steep, 10- to 15-foot berm south of Restaurant Row. The 2012 RBSP placed material at this site in fall 2012 so the cobbles are less exposed. The site parallels Coast Highway 101. The beach has large boulders surrounding the restaurants acting as the key barrier between these structures and the sea. The length of the roadway is also protected by riprap. No obstructions are between the materials placement site and restaurants. However, for motorists traveling on Coast Highway 101, the higher elevation of the road and the relatively steep drop-off to the beach reduce the view of the beach itself, and the primary focal point is the ocean. There are also distant views of this site for residences on the hills north and south of San Elijo lagoon. The Cardiff site would have a combination of viewers from Restaurant Row, motorists on Coast Highway 101, the beach, and distant views from private residences.

Solana Beach

The proposed placement site in Solana Beach is located just north of Estrella Street and extends approximately 4,700 feet (0.9 mile) south. Steep cliffs abut the placement site and the area consists of a gently sloping sand beach with scattered rocks and cobbles. Residential development and some commercial uses exist near the placement site along the bluffs. Views of the beach along this stretch are dependent upon the tides and the season. Prior to materials placement at this site by the 2012 RBSP (in fall 2012), no dry beach existed at high tide, as waves crashed directly against the cliffs. This recent sand placement project resulted in some sandy beach although it would be winnowed by time and tides. There is a small sandy beach at

Fletcher Cove, which sits above the high tide mark. At low tide, a low profile sand and cobble beach is typically visible below the cliffs. The Solana Beach site would have a combination of viewers from bluff top private residences and commercial uses and from the mostly cobble beach.

Torrey Pines

The Torrey Pines site is located approximately 6 miles south of the project site. Cliffs south of the site range in elevation from approximately 50 to 200 feet. The beach trail from the Torrey Pines State Reserve descends onto the beach, south of the placement site. With the exception of the parking area for the Torrey Pines State Reserve, no development exists in the vicinity of this site. Recreational viewers traveling along the hills north of Los Peñasquitos Lagoon have distant views of the sand placement site. The Torrey Pines disposal site would be one component of the viewscape, which includes the lagoon, beach, and steep hills of Torrey Pines State Reserve. This beach location was not augmented by the 2012 RBSP in fall 2012 and the material that was placed under the 2001 RBSP is no longer visible. The Torrey Pines site would have a combination of viewers from the State Reserve, Coast Highway 101, and the beach.

Light and Glare

The only source of lighting within the Reserve is the Nature Center. Nighttime lighting along Coast Highway 101 is from motor vehicles and "Restaurant Row," where a variety of commercial and residential land uses contribute to the ambient lighting and brightness levels in the project area. Light poles are provided along I-5; however, the primary source of light and glare is from motor vehicles traveling along Coast Highway 101 and residences on the hilltops. Residences on the hilltops are well lit. Generally, the major sources of illumination for each of the possible materials placement sites are from streetlights, vehicle headlights, and interior and exterior building lighting (residential, office, commercial) in the surrounding land uses.

3.9.2 CEQA THRESHOLDS OF SIGNIFICANCE

A significant impact related to visual resources would occur if implementation of the proposed project would:

A. Have a substantial adverse effect on a scenic vista or on valued focal points from public roads, trails, scenic highways, or recreational areas;

B. Substantially detract or contrast with the existing visual character or quality of the site and its surroundings;

C. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or

D. Create a new source of substantial light or glare, which would adversely affect daytime or nighttime views in the area.

The CEQA thresholds of significance for visual resources are derived from Appendix G of the State CEQA Guidelines and from the County Guidelines for Determining Significance for visual resources.

3.9.3 ENVIRONMENTAL CONSEQUENCES

Overview of Methodology

Lagoon restoration would temporarily impact the visual environment by introducing construction equipment inside the lagoon and changing the views of the lagoon during the construction time period. Alternative 2A would also result in changes at the Coast Highway 101 bridge and at the beach for a new inlet (Alternative 2A only). Alternative 1B, Alternative 1A, and the No Project/No Federal Action Alternative would not result in the new inlet/bridge. All alternatives, with the exception of the No Project/No Federal Action Alternative, would generate some material for disposal that would be placed in various locations, including beach sites. The significance of this visual change depends on a variety of factors, including the degree to which the project would be seen by potentially sensitive viewers, viewer attitudes and activities, the distance from which the project would be observed, and the extent the project would be consistent with established visual quality goals of the adjacent cities.

The anticipated visual impact of the proposed project was assessed in the field and based on a computer-generated visual simulation. Field and office evaluation was undertaken to document the visual contrast of the project based on the degree of change in line, form, color, and texture. Three levels of contrast were considered: weak, moderate, and strong. Weak contrast means minor or low visual contrast with the surrounding landscape, while strong contrast means the facilities would be highly evident or dominate a setting. Moderate contrast would be noticeable, but not dominant. Each alternative was also considered in terms of conformance with applicable goals and policies in the Encinitas and Solana Beach General Plans.

Sensitive Viewers

Visual sensitivity is dependent upon viewer attitudes, the types of activities in which people are engaged when viewing the project, and the distance from which the project would be seen.

Overall, higher degrees of visual sensitivity are correlated where people are engaged in outdoor recreational pursuits or participate in scenic or pleasure driving. Residential views can be considered visually sensitive as well. Conversely, visual sensitivity is considered low to moderate in industrial or commercial areas where the scenic quality of the environment does not affect the value of the activity.

For the lagoon restoration evaluation, sensitive viewers are identified as users of the Reserve or beach (trails or Nature Center), drivers along scenic roads (Coast Highway 101, I-5, and Manchester Avenue), and viewers on the northern and southern bluffs, primarily at the city-designated vista point (San Elijo Avenue and Kilkenny Drive, which overlooks the lagoon and coast) and the residential areas. The vista point reflects public sensitivity, which is valued more than the private views of residents. A total of seven key views are identified for evaluation (Table 3.9-1) and shown in Figure 3.9-1. A photograph at each location is provided in Figures 3.9-2 through 3.9-6.

Table 3.9-1
List of Key Views

Key View Number	Location	Representative Viewers	Sensitivity
Key View 1	Existing trail accessed from North Rios Avenue	Reserve trail user Residential viewers on hilltop homes in Solana Beach (private views)	High to moderate
Key View 2	Cardiff Beach	Beachgoer	High
Key View 3	Coast Highway 101	Scenic driver and cyclist	High
Key View 4	View Point of San Elijo Avenue and Kilkenny Drive	Visitor to scenic view point Residential viewers on hilltop homes in Encinitas (private views)	High to moderate
Key View 5	Nature Center	Reserve user	High
Key View 6	I-5	Scenic driver	High to moderate
Key View 7	Manchester Avenue	Scenic driver and cyclist	High

A computer-generated visual simulation is provided at Key View 1 to illustrate the changes to the site post-restoration. There is a simulation for Alternative 2A, (Figure 3.9-7) and for Alternative 1B (Figure 3.9-8). The simulations are not necessarily representative of exact project final design but provide a useful illustrative example.

For the materials disposal/reuse site evaluation, sensitive viewers were identified as public beachgoers and public recreational users, and to a lesser extent residential viewers at hilltop homes in Solana Beach and Encinitas, as summarized in Table 3.9-2.

Table 3.9-2
Representative Viewers at Materials Placement Sites

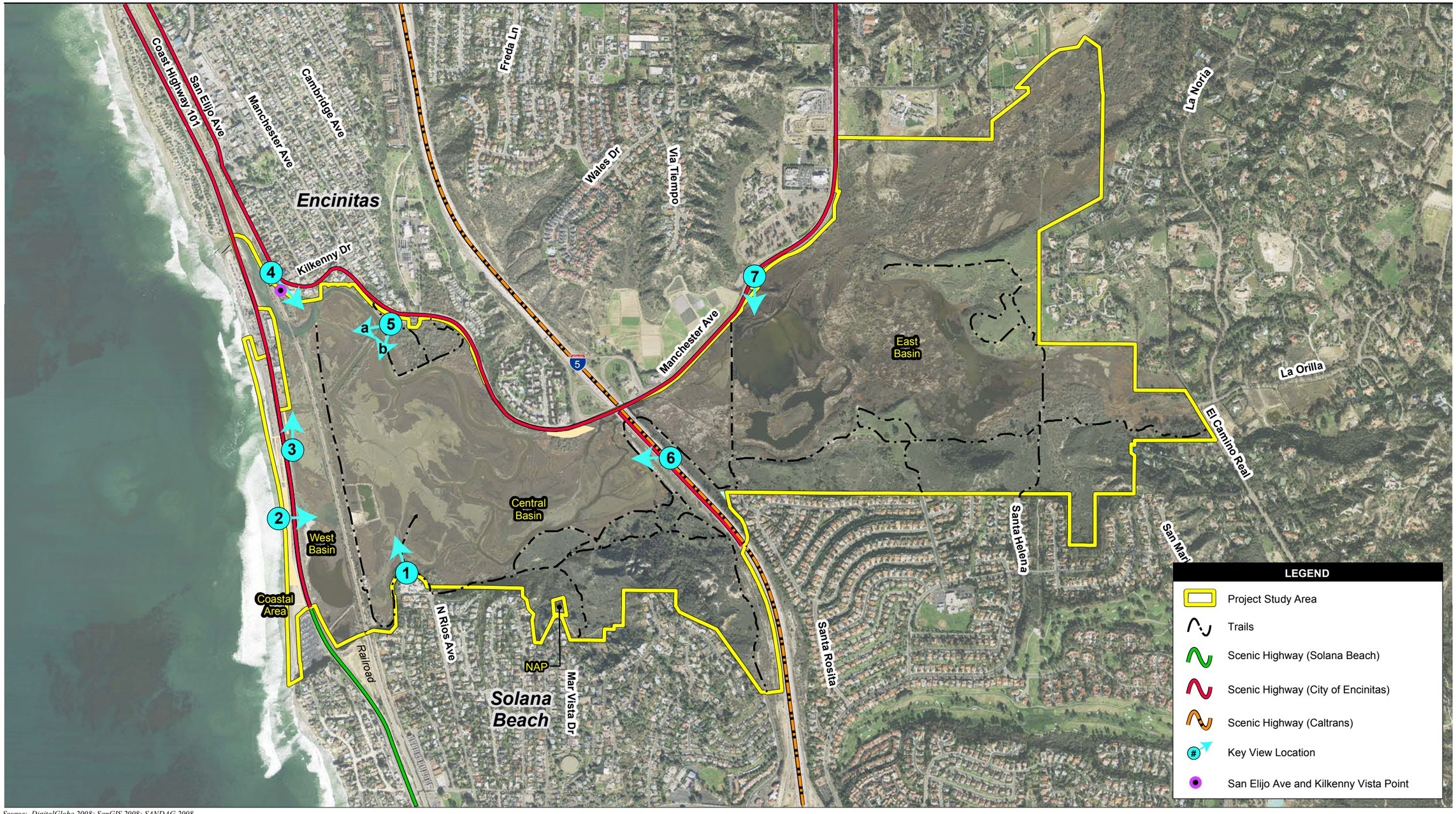
Location	Representative Viewers	Sensitivity
Moonlight	Park users Beach–goer Residential viewers (private views)	High to moderate
Leucadia	Beach–goer Residential viewers on hilltop homes (private views)	High to moderate
Cardiff	Beachgoer Scenic driver and cyclist Restaurant patrons Residential viewers on hilltop homes (private views)	High to moderate
Solana Beach	Beach–goer Commercial patrons Residential viewers on hilltop homes (private views)	High to low
Torrey Pines	Beachgoer Scenic driver and cyclist Torrey Pines State Reserve recreationalist	High

Lagoon Restoration

Lagoon restoration would generally consist of dredging and grading within the lagoon to raise or lower elevations, modifying existing lagoon inlet/channels to enhance tidal flow in and out of the lagoon, disposing of sediments excavated from the lagoon to different locations, and restoring graded areas within the lagoon to facilitate recovery of habitat. The construction phase of the proposed project would be temporary and is anticipated to begin January 2016 and would last up to 3 years. No buildings would be constructed as part of Alternative 2A, or either of the other build alternatives. Structural changes proposed would be a new inlet and bridge at Coast Highway 101 under Alternative 2A. The proposed restoration would also require maintenance so equipment would be periodically visible in the post-construction time period. The visible elements would vary substantially depending on the alternative.

No permanent new sources of lighting would be created under Alternative 1B or Alternative 1A. There is existing overhead lighting on Coast Highway 101; with the new bridge as proposed under Alternative 2A, there may be changes in the location of that lighting but it would be modest and incremental along this already lighted roadway. As such, no further analysis related to permanent lighting impacts is warranted.

The lagoon is bounded by designated scenic roads (locally designated Coast Highway 101 and Manchester Avenue) and traversed by an eligible state scenic highway (I-5). The restoration project would not change Manchester Avenue or I-5. Coast Highway 101 would be altered only



Source: DigitalGlobe 2008; SanGIS 2008; SANDAG 2008

0.25 0.125 0 0.25 Miles

Scale: 1:15,000; 1 inch = 1,250 feet

Figure 3.9-1
Scenic Resources and Location of Key Views

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Key View 1 - View from the trail looking north across the central and west basins of the lagoon

Figure 3.9-2
Key View 1 – Trail at North Rios Avenue

Key View 2 – View from Cardiff Beach looking south with Highway 101 to the east

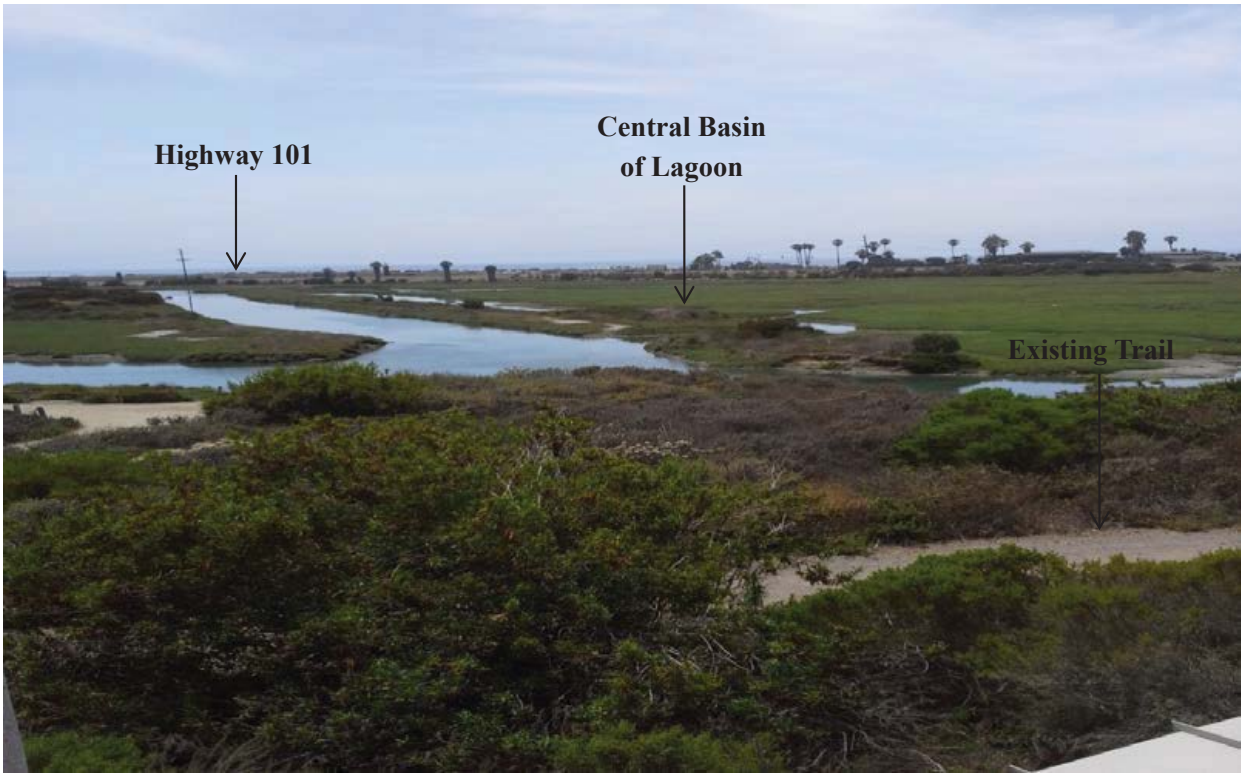
Key View 3 – View from Highway 101 looking north

Figure 3.9-3
Key View 2 and Key View 3

Key View 4 - View looking southwest toward the central and west basins of the lagoon

Figure 3.9-4
Key View 4 –View Point at San Elijo Avenue and Kilkenny Drive

Key View 5a – View from the Nature Center looking northwest



Key View 5b – View from the Nature Center looking southwest

Figure 3.9-5
Key View 5 – Nature Center

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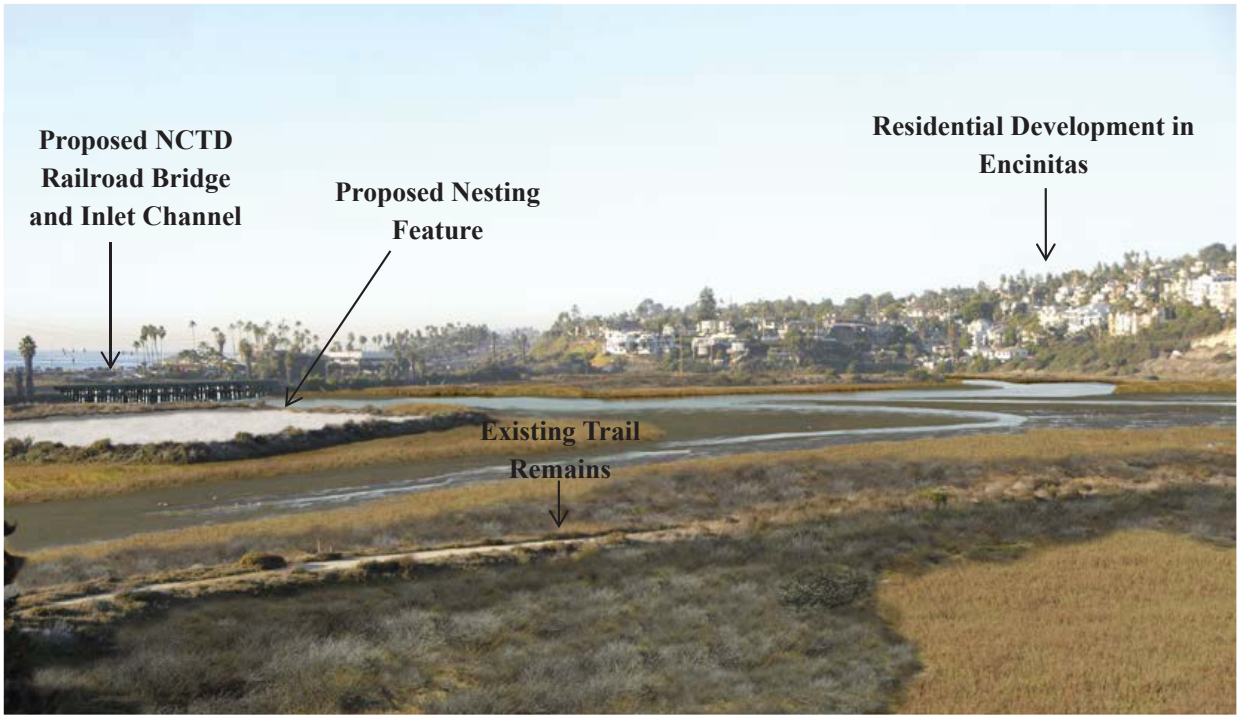
Key View 6 – View from I-5 southbound lanes looking west toward the central basin

Key View 7 – View from Manchester Avenue looking southwest toward the east basin

Figure 3.9-6
Key View 6 and Key View 7

Key View 1 – Existing conditions at North Rios Avenue Trail looking north



Key View 1 – Alternative 2A Visual Simulation

Figure 3.9-7
Alternative 2A Simulation at Key View 1

Key View 1 – Existing conditions at North Rios Avenue Trail looking north

Key View 1 – Alternative 1B Visual Simulation

Figure 3.9-8
Alternative 1B Simulation at Key View 1

under Alternative 2A, as a bridge would be constructed over the new inlet. No trees, rock outcroppings, or historic buildings would be affected by any of the alternatives, but changes would occur to the scenic lagoon. Thus, the discussion of substantial damage to scenic resources within a scenic highway will be focused on Alternative 2A.

Alternative 2A–Proposed Project

During the construction phase, the visual character of the project site would change substantially from existing conditions. Vegetation would be removed from a large portion of the central basin and substantial landform alteration would occur. Such activities would be temporary but highly visible because of the contrast in color and texture with the vegetation being replaced by exposed soil. In some phases, necessary flooding would result in a greater area being underwater so the soil contrast may be reduced.

In either case, there would be construction equipment in atypical locations. Visual changes within the lagoon during the construction phase would include the presence of construction equipment, such as bulldozers, heavy trucks, and other standard equipment operating on land; a floating dredge operating on the water; lengths of pipeline extending through the lagoon area; equipment and materials stored in staging and laydown areas; and other typical construction activity. Additional construction-related features such as the enclosed structure containing the electrical power substation would be visible as part of construction activities as described in Section 2.10.2.

The lagoon and surrounding bluff areas have a high visual value due to the natural and open space aesthetic and unique habitat and conditions specific to the lagoon setting. The construction-related changes would include dredging and grading within the lagoon basins and would be highly evident at Key Views 1, 3, 4, 5, and 6. No changes would be made to existing bluffs surrounding the lagoon. Because of the elevation difference, viewers at Cardiff Beach (Key View 2) would not be able to see the changes to this basin. Viewers along Manchester Avenue in the east basin (Key View 7) would see the demolition of the CDFW dike and some grading, but the construction scale in this basin would not be as extensive as from other key views. Viewers at the San Elijo/Kilkenny vista point (Key View 4) would experience a strong contrast due to extended views of construction activities from this hilltop viewpoint and an expectation of seeing the lagoon in its natural condition from this site. Throughout the four phases of the approximate 3-year Alternative 2A schedule, construction equipment and activities would be visible at some locations within the lagoon area (i.e., construction material at staging areas, equipment operating within the lagoon basin, etc.). However, broad views of the Pacific Ocean and hills in the distance would continue. Users of the trail system (Key View 1) and the Nature Center (Key View 5) would experience a strong contrast because of the overall change

and likely perceived degradation in visual character, but also because these users have higher scenic expectations. Thus, the contrast would be strong as a result of construction activities. Overall, the construction phase would represent a temporary, but significant change in the visual quality and character of the lagoon for key viewers. The **temporary impact to trail users and vista point viewers would be significant and substantially adverse (Criteria A and B).**

The change in view would be noticeable for drivers along Coast Highway 101 (Key View 3) or Manchester Avenue. A portion of a scenic driver's view would be altered by the presence of the construction equipment in a portion of the lagoon and the remaining visual aesthetic across the rest of the lagoon; the expansive views of the ocean would remain for the driver's scenic viewing. However, this altered portion of the view is a relatively small area of construction equipment located in the overall context of the large lagoon area and expansive ocean views, both in the immediate viewing area. Additionally, it is not uncommon for construction activities to be visible within and around the lagoon due to ongoing maintenance activities, such as existing inlet excavation, that currently take place. While their expectation for an undisturbed scenic experience may not be met at all times during construction, the overall experience by scenic drivers would be extremely short term (a few minutes as they drive by) and other scenic elements would remain intact, specifically the Pacific Ocean. Therefore, **impacts to scenic drivers would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

The project would result in some temporary new light sources during 24-hour construction activities, but they would be periodic and small scale. Some construction activities would be restricted to daytime hours, but some activities require operation 24 hours a day to remain efficient (e.g., dredging activities). Additionally, activities like materials delivery may be scheduled for nighttime hours. It would be necessary to have 24-hour dredging operations over the course of the project. The light sources necessary during nighttime dredging operations would include illumination of the immediate surrounding area of work and lighting contained within the enclosed cabin area. Lighting would be located on the dredge and would be comparable to bright street lights. The lights would be downshielded to direct the light down toward the area of work and minimize spillage or glare (PDF-7). A spotlight on the dredge may be used if anchors need to be reset (up to three times per night). In addition to the lights from the dredge, the crew boats delivering dredge personnel to the dredge at the shift change during dark hours (generally around 11 p.m. and 6 a.m.) would have a spot light used to temporarily illuminate the immediate boarding area and waters in front of the boat while transiting to and from shore and dredge plant. Lighting at construction launch or staging areas may also be necessary to facilitate nighttime activities, such as material deliveries, and would also be similar to a street light directed toward the work area. Some temporary lighting may also be required at booster pump locations during service and short-term checking by operations personnel.

Although the lighting would be noticeable and visible to surrounding viewers and may appear out of place within the unlit lagoon area, the area that would be lit would be localized and focused on the immediate work area. The nighttime lighting would not create a substantial area of brightly illuminated space and would be of the scale of typical street lighting. The lights are not of a height or intensity that allows for expansive spreading or spill of light across a wide area. The light source would move slowly throughout the lagoon as dredging progresses from one location to another and would not stay at one location for an extended period of time. The nighttime lighting would only be necessary during dredging activities that require 24-hour operations (10 months in Phase 1, 7 months in Phase 2, and 7 months in Phase 3). For these reasons, **the temporary light and glare impact would not be substantially adverse and would be less than significant (Criterion C).**

Construction activities associated with the new inlet and Coast Highway 101 bridge would be clearly visible to patrons of the State Beach (Key View 2) and drivers along Coast Highway 101 (Key View 3). These viewers would see a change in the roadway as a new bridge deck is constructed on one side and motorists continue on the other side. This is not uncommon in southern California. For example, improvements are currently ongoing to the Torrey Pines bridge near Del Mar, also directly at the beach and visible to drivers and beachgoers. Drivers would be proceeding at a fairly rapid speed and **this impact to motorists would be less than significant and not substantially adverse in the short term or long term (Criteria A and B).**

Construction of the new inlet and CBFs on either side would be highly visible and a contrast to the current beach character. The CBFs would consist of two relatively short and low rock features along the outer reach of the tidal inlet channel. Rock sizes may consist of 3- to 5-ton stones that are several feet in diameter, nested together to increase the structural integrity of the structure. The platform of the CBFs attached to the bridge abutments would extend seaward approximately 230 feet. The CBFs are proposed to be approximately 100 feet wide and extended laterally along the highway bridge approach for a distance of 230 feet. With this design, the CBFs would be visible above the beach profile in winter, and then mostly buried in summer. Figure 2-7 shows faux finish that would be applied to the visible CBF to mimic natural material. As shown, it appears similar in color to the adjacent sandy material with a rough surface to reduce the artificial appearance (PDF-38). Regardless, the CBFs would introduce a built, linear feature perpendicular to Coast Highway 101 extending several hundred feet toward the ocean. Sometimes it could appear as a berm and sometimes it could be mostly buried. The contrast would be strong for some beach users, and although efforts would be made to soften the appearance via naturalized finish and partial to full burial of the feature (depending on the season), the contrast would remain substantial. **Construction of the new inlet and CBF would result in substantial adverse and significant temporary (during construction) and long-term visual impacts (Criteria A, B, and C).**

Over 5–10 years post-restoration, as vegetation in the lagoon becomes reestablished at the new elevations/grade, the visual character of the lagoon would become similar to the existing preconstruction conditions but would host a wider variety of native vegetation and lagoon habitats of visual interest. Conditions would return due to active restoration (planting plants) as well as natural recruitment. Figure 3.9-7 illustrates the post-restoration condition at Key View 1, the trail accessed at North Rios Avenue. As shown, more open water would be visible resulting in an increase in the tidal prism. The mosaic of water, mudflats, and vegetation would return. Users of the trails and Nature Center, residents looking at the lagoon, persons at the San Elijo/Kilkenny vista point and scenic drivers would experience an open, natural system similar in character to the present condition. The increased habitat diversity may be even more interesting and appealing to trail users and visitors at the Nature Center. **The long-term visual impact associated with the restored lagoon would not be substantially adverse and would be less than significant due to implementation of the restoration project (Criteria A, B, and C).**

Alternative 2A would require maintenance dredging in the lagoon at periodic intervals. A dredge would be mobilized from the dredge launch ramp near the nesting site and move throughout the sedimentation basin to remove sand. The work may require up to 5 months for completion and is anticipated to occur every 3 to 4 years. As such, this would result in periodic visual impacts due to maintenance activities. These maintenance activities would be primarily limited to the sedimentation basin area, within the central basin, which would be open water near the new NCTD railroad bridge. Additional maintenance and adaptive management activities could occur outside of that area, but would be focused in specific areas of the lagoon and would not be extensive. The dredge would appear as a modest-sized boat (approximately 20–30 feet long), moving in an open water area. The bridges and approaches for the railroad and Coast Highway 101 would be in the background, as well as vehicles and trains passing behind the boat/dredge. The contrast of this single boat in this focused area with several transportation features would be moderate. The vast majority of the lagoon would remain unaffected during maintenance. Finally, the dredge would be present approximately 10 percent of the time over a 48-month period. Overall, **this impact would be short term, not substantially adverse, and less than significant (Criteria A, B, and C).**

Alternative 2A would require the demolition and reconstruction of the Coast Highway 101 bridge at the location of the new inlet. Roadway improvements would include the new bridge structure (with pedestrian/bicycle path) and lane modifications approaching the bridge. Coast Highway 101 is a designated Scenic Highway. The segment of Coast Highway 101 at the proposed location for a new inlet, as well as the entire roadway segment within the project study area, has been widened and improved over the years and currently has the appearance of a modern roadway. The reconstruction of the Coast Highway 101 bridge structure and associated approach lanes would not bring a new transportation feature to the area; rather, it would modify

the current roadway within its existing alignment. Because the highway has been improved and widened in the past, the new bridge structure and repaved lanes would not substantially change the overall aesthetic of the area. Motorists on Coast Highway 101 would continue to experience a modern roadway driving environment with visual highlights of the Pacific Ocean to the west, and lagoon to the east. On the bridge itself, views would broaden as motorists would be slightly elevated as compared to current conditions. But the duration of the experience would be short term. Lighting on the new bridge would be similar to existing lighting on the road and would not constitute a substantial new light source. From distant views, the new bridge and resurfaced lanes would blend into the existing highway aesthetic and would not appear out of place or as a strong contrast. For these reasons, **the long-term visual impact associated with Coast Highway 101 bridge reconstruction under Alternative 2A would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

Alternative 1B

Construction of Alternative 1B would be similar to Alternative 2A; however, Alternative 1B would not construct a new bridge along Coast Highway 101 or a new inlet lined with CBFs. The construction activities for Alternative 1B would be highly visible at Key Views 1, 3, 4, 5, and 6. Viewers at Cardiff Beach (Key View 2) would not be able to see the changes to this basin nor would there be notable changes to viewers at the beach. Viewers along Manchester Avenue (Key View 7), who would have direct views of the central and east basin, would observe construction in the main channel as it is redirected west of I-5 and extended farther into the east basin. Viewers at Key View 4 (hilltop vista point at San Elijo/Kilkenny), users of the trail system (Key View 1), and the Nature Center (Key View 5) would experience a strong contrast because of the overall change and likely perceived degradation in visual character, but also because they have higher scenic expectations. Throughout the four phases of the approximate 4-year Alternative 1B schedule, construction equipment and activities would be visible at some locations within the lagoon area (i.e., construction material at staging areas, equipment operating within the lagoon basin, etc.). **The visual impacts to these sensitive viewers would be temporary, as they would only occur during project construction, but significant and substantially adverse because of the multiyear duration of construction and the extent of the lagoon modification (Criteria A and B).**

Similar to Alternative 2A, scenic drivers' overall experience of an altered lagoon aesthetic would be short term (a few minutes as they drive by) and there are other scenic elements that would remain intact, specifically, views of the Pacific Ocean. The altered portion of the view would be a relatively small area of construction equipment located in the overall context of the large lagoon area and expansive ocean views, both in the immediate viewing area. Construction activities are periodically visible within and around the lagoon due to ongoing maintenance

activities that currently take place. **Thus, impacts to scenic drivers would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

The discussion of nighttime light and glare provided under Alternative 2A would also apply to Alternative 1B. **The periodic light and glare during 24-hour construction activities would not be substantially adverse and would be less than significant.**

As shown in Figure 3.9-8, the post-restoration views under Alternative 1B would be different, but would be compatible with the surrounding landscape and satisfy expectations of viewers on trails, at scenic view points, and at the Nature Center. The post-restoration views would continue to include lagoon habitats, channels and basins, and other flora and fauna associated with the lagoon and expected by lagoon viewers. Alternative 1B would modify habitat distributions in the lagoon, which could modify viewer experience as the balance of open areas, habitat types, and open water areas would be altered from existing conditions. Existing channels and areas of mudflat would be enlarged, resulting in a higher proportion of open water and unvegetated areas compared to existing conditions. While this is a modification from the existing lagoon aesthetic, it is in character with the visual environment expected of a lagoon setting and would not result in a deteriorated or highly modified viewing experience. The existing inlet and bridge along Coast Highway 101 would be the same in character and size as the existing one, as would Coast Highway 101. The retrofitting work necessary under Alternative 1B would consist mainly of work to the understructure of the bridge and would not create substantial visual changes to the bridge itself. For these reasons, **the permanent visual impacts would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

Alternative 1B would require annual inlet maintenance under Coast Highway 101 and in the channel underneath the railroad. Additional channel maintenance and adaptive management activities may occur in other focused areas of the lagoon. Inlet maintenance would be very similar to routine maintenance that currently occurs in these locations at the existing inlet, which is moderately visible to beachgoers near the inlet and drivers along Coast Highway 101. As described for Alternative 2A, other maintenance activities would generally occur via a small dredge in open water with the existing visual elements of Coast Highway 101, traffic, trains, and other infrastructure in the background. Annual maintenance is expected to take approximately 4 weeks to complete. The temporary contrast of the construction equipment in this visual setting would be moderate and the vast majority of the lagoon would remain unaffected during maintenance. Therefore, **the impact would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

Alternative 1A

Construction of Alternative 1A would result in more minimal and fewer physical changes to the study area. This alternative would not include construction of a new bridge along Coast Highway 101 or a new inlet with CBFs. Viewers at Key Views 1, 4, and 5 would have higher degrees of visual sensitivity, as they would have direct views of the project study area. Users of the trail system (Key View 1), viewers on the vista point in Encinitas (Key View 4), and visitors at the Nature Center (Key View 5) would experience a moderate contrast with construction equipment in the lagoon but construction activities would be focused on select channels with less broad grading and habitat conversion. Viewers would likely perceive a temporary degradation in visual character during this time. Viewers at Cardiff Beach (Key View 2) would not be able to see the changes to this basin due to the elevation of the roadway. The retrofitting work necessary under Alternative 1A would consist mainly of work to the understructure of the Coast Highway 101 bridge and would not create substantial visual changes to the bridge itself. Viewers looking at the channel mouth and bridge understructure would be limited to beach visitors at that exact location. The anticipated construction schedule for Alternative 1A would be less than two years, substantially shorter than the other alternatives. Because of the reduced area of activity where construction equipment and operations would be temporarily visible and the reduced timeframe that construction would occur, the **overall, temporary visual impacts would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

Similar to that described for Alternative 2A, viewers along Manchester (Key View 7) would have low visual sensitivity due to the intermittent foreground views and short duration of the views. **Impacts to scenic drivers (Key View 3 and Key View 6) would not be substantially adverse and would be less than significant (Criteria A, B, and C),** as their overall experience would be extremely short term (a few minutes as they drive by), and other key scenic elements would remain intact.

The discussion of nighttime light and glare provided under Alternative 2A would also apply to Alternative 1A. **The periodic light and glare during 24-hour construction activities would not be substantially adverse and would be less than significant (Criterion D).**

Post-restoration views under Alternative 1A would be similar to existing views, but with enlarged channels presenting more open water to the viewer. The vegetation mosaic would vary, but the overall habitat types would remain. For this reason, **the long-term visual impact to viewer groups at the lagoon would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

Alternative 1A would require annual maintenance under Coast Highway 101 and in the channel underneath the railroad. Inlet maintenance consists of using earthmoving equipment to clear the existing tidal inlet channel from Coast Highway 101 to approximately the location of Kai's Restaurant, upstream to near the location of the first channel bend (west of the railroad line). This is not a substantial change from current inlet maintenance performed in the existing tidal inlet channel. There would be periodic maintenance activities visible during the calendar year, occurring approximately once each year and lasting approximately 2 weeks in duration. Other maintenance and focused areas of adaptive management activities would also occur over time. However, **impacts would be short term and in a focused area of the lagoon; therefore, impacts would not be substantially adverse and would be less than significant (Criteria A, B, and C).**

No Project/No Federal Action Alternative

The No Project/No Federal Action Alternative would not result in modifications to the lagoon or Coast Highway 101/inlet and no change would occur to existing conditions or resources. Under this alternative, certain areas of the lagoon could continue to convert to salt marsh. While this may reduce habitat diversity and present a mono-typical form, the contrast would be weak relative to adjacent wetlands. **Therefore, there would be no impact to visual resources since the project area would remain unchanged from its existing condition. Impacts would not be substantially adverse and would remain less than significant (Criteria A, B, C, and D).**

Materials Disposal/Reuse Sites

The visual impact analysis for the materials disposal/reuse sites addresses the potential for the various alternatives to impact existing visual conditions at the materials placement sites for adjacent viewers (beach users and viewers from vista points on the cliffs/bluffs above). Information is largely referenced from the 2012 RBSP EA/EIR (SANDAG 2012). Depending on the quality of materials to be exported, a number of different disposal and/or reuse scenarios are proposed. These methods include offshore disposal, offshore stockpiling, nearshore (inside littoral cell), onshore (beach placement), and onshore fill.

The visual changes associated with the materials disposal/reuse component, including construction equipment and pipelines on the beach would only occur during construction activities, resulting in temporary visual impacts. Once onshore material placement is completed, the placement material would be similar to the existing beach and any discoloration of the sediment would be short term (typically 1 to 4 years) and not a substantial degradation of the overall sandy beach appearance. The placement material would be washed by waves, exposed to the sun, and eventually mixed with the existing sand to eliminate potential contrast. This

nourishment material is a beneficial enhancement of the beach because sand is preferable to cobble both visually and recreationally.

Some construction activities would be restricted to daytime hours, but some activities require operation 24 hours a day to remain efficient (e.g., dredging and subsequent placement/disposal activities). Additionally, activities like materials delivery may be scheduled for nighttime hours. Lights may be necessary at the beach sites to allow for 24-hour sand placement activities. Construction lighting would consist of lights on poles, similar to street lights, to illuminate the immediate work area when the dredge is discharging. Lights would be downshielded to minimize spillover into areas beyond the work zone and directed toward the ocean and away from any nearby residential areas (PDF-7). Another light source may also include the headlights of construction equipment, such as bulldozers working to spread the material on the beach area. These lights would be only in the immediate work area in front of the equipment and would be focused toward ground level, similar to a car headlight. The lighting would only be necessary during onshore material placement, which would require fewer than 60 days at an individual site. Some temporary lighting may also be required at booster pump locations during service and short-term checking by operations personnel. Because the lights would not create a substantial source of light and many material placement sites are near areas that include street lighting, residential lighting, and lights associated with vehicle traffic, **the temporary use of night lighting for construction activities would not be substantially adverse and would be less than significant (Criterion D)**.

Alternative 2A–Proposed Project

Alternative 2A would involve beneficial reuse of material exported from the dredging site. Dredging and transport of material to various sand placement sites for reuse would take approximately 10 months, but not more than 60 days at any beach placement site. Construction activities could result in temporary visual changes to viewers in proximity to these sites or the transport routes to access these sites as described in the analysis below for each material placement scenario.

Offshore Stockpiling

Offshore stockpiling would alter existing views along the materials disposal/reuse site because of proposed equipment that would be utilized. A single pipeline would traverse the beach into the ocean waves. It would then be largely invisible on the sea bottom. The onshore portion of the pipeline would have up to two booster pumps located at intervals along the pipeline to keep the materials moving at an appropriate speed to avoid settling. The booster pumps appear industrial in nature, looking like a large engine that straddles the pipeline, and would be fenced with chain-

link if located on an unsecured beach area. While they are out of character with the beach and ocean setting, they are visually consistent with the pipeline and other construction-related equipment that would be apparent during the construction period. There would be offshore equipment (e.g., offshore mooring, monobuoy, and barge) that would appear visible on the horizon much like many other boats (e.g., fishing, pleasure, etc.) that are active along the coast. The offshore equipment would not be highly evident or dominate the landscape. Furthermore, this would not be a permanent or significant visual impact. **The short-term nature of offshore stockpiling activities and the limited visibility of the pipeline to sensitive viewers on the beach or bluffs above would result in a less than significant impact that is not substantially adverse (Criteria A, B, and C).**

Nearshore (Inside Littoral Cell)

Nearshore placement of beach-quality material under Alternative 2A may occur off of Cardiff State Beach, just outside of the surf zone. Beachgoers would have direct views of the temporary pipe that would be placed from the lagoon mouth into the surf zone. The pipeline would then traverse the ocean floor to the proposed placement location; thus, it would not be visible by viewers. Similar to the offshore stockpiling description, booster pumps would be necessary along the onshore pipeline. **The short-term nature of offshore stockpiling activities and the limited visibility of the pipeline to beachgoers would result in a less than significant impact that is not substantially adverse (Criteria A, B, and C).**

Onshore (Beach Placement)

The potential beach placement locations have a variety of sensitive viewer, dependent upon individual location as detailed in Table 3.9-2. All locations have beachgoers that could view the construction equipment and activities, and most locations also have residential areas with views of the beach area. Each beach has a unique set of viewers with a range of viewer sensitivities, such as Torrey Pines, which has recreational viewers from the state reserve area; Moonlight, which has a nearby park area; or Cardiff, which includes nearby seaside restaurants known for their views of the ocean. However, all of these locations have been recipients of beach nourishment in the past, as part of the 2001 RBSP or 2012 RBSP, or other material placement programs. The visual occurrence of construction equipment on these beaches is not highly uncommon to these locations or associated viewers.

Onshore material placement could occur via pipeline delivery on the back beach (Cardiff), or via barge and monobuoy (Section 2.10.2). Similar to the offshore stockpiling description, booster pumps would be necessary along onshore pipelines. Construction equipment (i.e., pipeline, barge, monobuoy, training dike, etc.) would be temporarily visible to various beachgoers and

viewers on the bluffs/cliff above. The expected time for sand placement on specific sites is between 2 to 4 weeks, depending on the amount of sand being placed and the rate at which sand is discharged onto the beach, but not more than 60 days. During the 2001 and 2012 RBSPs, sand was periodically placed next to the discharge pipe to allow lifeguard vehicles and pedestrians to cross over the pipe. This would also occur with the proposed project so that the visible linear extent of the pipeline is minimized.

Onshore material placement would temporarily degrade the existing visual character or quality of the site during dredging activities, but the short-term nature of the activities and the visual memory of past similar activities would result in not substantially adverse and less than significant impacts to beachgoers (Criteria A, B, and C).

Alternative 1B

Materials disposal/reuse under Alternative 1B would involve similar construction activities and material placement options as those described for Alternative 2A, but with less volume of materials at nearshore placement and onshore fill (see Table 2-20). Because of the lesser volume of material being dredged from the lagoon under Alternative 1B as compared to Alternative 2A, the construction period would be somewhat shorter; the temporary visual change due to construction activities would be slightly less than that described for Alternative 2A. However, the equipment necessary to perform the dredging and material placement would be almost identical. Thus, analysis discussed above for Alternative 2A is applicable to Alternative 1B and the **temporary visual impacts resulting from material placement activities would be less than significant and not substantially adverse (Criteria A, B, and C).**

Alternative 1A

Offshore Disposal

Under this alternative, material would be conveyed via pipeline and barge to LA-5. Short-term impacts would be identical to Alternative 2A for the pipeline and booster pumps conveying material from the dredge to an offshore barge. Offshore equipment (e.g., offshore mooring, monobuoy, and barge) would appear visible on the horizon much like many other boats (e.g., fishing, pleasure, etc.) that are active along the coast. The actual disposal of the material from the barge to the ocean floor would be so far offshore that the barge would not be visible to viewers on the beach or people on the bluffs. **The short-term nature of offshore disposal activities and the limited visibility of the pipeline to beachgoers would result in less than significant and not substantially adverse visual impacts (Criteria A, B, and C).**

No Project/No Federal Action Alternative

The No Project/No Federal Action Alternative would not result in material export. Therefore**, there is no visual impact since the existing condition would remain unchanged. Impacts would not be substantially adverse and would remain less than significant (Criteria A, B, C, and D).**

3.9.4 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Mitigation measure Visual-1 would be required for implementation of Alternative 2A and Alternative 1B.

Visual-1 Temporary screening would be placed around construction areas that are secured with a chain-link fence (such as booster pumps, staging areas, etc., as shown in Figure 2-15) to provide visual screening of the equipment located within the secured area. Screening could be brown or green mesh or other similar screening material attached to the fencing that would visually hide or obscure the interior of the fenced areas. The screening would extend as high as the chain-link fence, which would range from approximately 6 to 10 feet, depending on the area being secured.

While the visual screening of fenced areas as proposed in mitigation measure Visual-1 may partially reduce some visual impacts, this measure would not fully mitigate the visual impact of the construction activities occurring throughout the lagoon area. The screening may reduce some of the adverse visual effects of construction-related equipment and materials within small fenced areas, but this would be a localized and focused reduction of a portion of the entire visual impact and would not be of the magnitude to reduce the overall visual impact of the lagoon under construction. To perform the lagoon restoration as proposed in Alternative 2A and Alternative 1B, construction activities must occur throughout the lagoon area and the proposed timeframe is necessary for all actions to occur. It is not feasible to achieve the desired restoration goals of these two alternatives in a shorter or less construction-intensive manner. Thus, there is no additional mitigation to fully reduce temporary adverse and significant impacts as a result of construction activities under Alternative 2A and Alternative 1B.

Long-term visual impacts associated with the inlet and CBFs under Alternative 2A are considered adverse and significant, and unmitigable The design of the CBFs allows for the features to be naturally buried to blend in with the beach area and have the lowest profile possible. Additionally, as described in PDF-38, the CBFs would be treated with faux finishes to provide a more “naturalized” appearance to look like natural bedrock, sandstone, or other

sedimentary features. No additional aesthetic treatments, design options, or other feasible mitigation measures are available.

Materials Disposal/Reuse

Potential impacts would be less than significant and no mitigation measures are proposed.

3.9.5 LEVEL OF IMPACT AFTER MITIGATION

Lagoon Restoration

CEQA: Mitigation measure Visual-1 would partially reduce the temporary visual impact that would result from construction activities throughout the lagoon; however, this measure would not fully mitigate the overall temporary visual impact.

The temporary construction impacts associated with Alternative 2A and Alternative 1B would be eliminated by the completion of the project and the removal of construction equipment and associated construction features such as the return of staging areas to their original condition. Additionally, the flora associated with the lagoon's visual environment would be restored by post-restoration planting and recovery. These impacts would be reduced to less than significant by the passage of time, not a mitigation measure.

The CBFs are designed to maximize burial and minimize the exposed hardscape, along with faux finishes to provide a more "naturalized" appearance. However, the introduction of two linear, perpendicular elements of substantial size to this cobbly/sand beach cannot be fully mitigated while still allowing the feature to perform its intended function of minimizing cobble migration into the lagoon. Permanent impacts associated with the inlet/CBF under Alternative 2A would remain significant and unavoidable.

NEPA: Mitigation measure Visual-1 would partially reduce the temporary adverse visual effects that would result from construction activities throughout the lagoon. While visual impacts associated with project construction of Alternative 2A and Alternative 1B within the lagoon would cease over time with the end of construction and the restoration/recovery of lagoon habitats, the temporary visual effects are considered adverse due to the length of time that the visual condition of the lagoon would be degraded as well as the sensitivity of viewers.

The visual change associated with the inlet/CBFs required under Alternative 2A is considered adverse, as the new feature would introduce a permanent, visually contrasting linear element that does not fully blend with the natural visual environment of the beach and ocean setting.

Materials Disposal/Reuse

CEQA: Due to the short-term duration of construction equipment and limited visibility to sensitive viewers during material placement, potential impacts would be less than significant and no mitigation measures are proposed.

NEPA: Due to the short-term duration of construction equipment and limited visibility to sensitive viewers during material placement, the temporary degradation of the visual environment is not considered adverse.

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